

CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A method of providing configuration information for a bridged virtual local area network (VLAN) within a communication network, comprising the steps of:
 - a. presenting a graphical user interface (GUI) to an operator;
 - b. receiving from the operator an identification of a node and of a physical port through the GUI;
 - ~~c. when the VLAN is not an existing VLAN, receiving a requested VLAN identifier (ID) from the operator through the GUI, and validating the requested VLAN ID received from the operator in step d by comparing the requested VLAN ID with VLAN IDs in a list of VLAN configurations for VLANs which are configured on the node;~~
 - ~~[[d.]]c. if the requested VLAN ID is valid, receiving a validated VLAN configuration information from the operator through the GUI, wherein the VLAN configuration information comprises a requested VLAN identifier (ID) and at least one virtual port to be associated with a set of the VLAN;~~
 - ~~d. validating the VLAN configuration information;~~
 - ~~e. generating locally a validated VLAN configuration according to the VLAN configuration information, wherein the validated VLAN configuration comprises a first set of at least one virtual port to be associated with the VLAN and a second set of zero or more virtual ports which cannot be assigned to the VLAN; and~~
 - ~~[[e.]]f. transmitting the validated VLAN configuration to the node.~~

2. (Currently Amended) The method of claim 1 wherein the step of receiving [[a]] ~~validated~~—VLAN configuration information comprises receiving, from the operator through the GUI, [[and]]an identification of at least one virtual port currently belonging to a member set of the VLAN, said at least one [[on]]virtual port being selected by the operator from a list of virtual ports currently in the member set.
3. (Currently Amended) The method of claim 2 wherein the step of receiving [[a]] ~~validated~~—VLAN configuration information further comprises the steps of:
 - a. receiving, from the operator through the GUI, an identification of zero or more virtual ports currently belonging to a forbidden set of the VLAN; and
 - b. receiving, from the operator through the GUI, an identification of zero or more virtual ports currently belonging to an untagged set of the VLAN; and wherein the step of validating the VLAN configuration information comprises:
 - c. ensuring that the member set and the forbidden set have no virtual ports in common.
4. (Canceled)
5. (Currently Amended) The method of claim 1 ~~further comprising the steps of~~ wherein the step of validating the VLAN configuration information comprises:
 - a. determining from the existing configuration information a number of VLANs currently configured on the physical port; and
 - b. ensuring that the configuration of [[fo]]the bridged VLAN on the physical port would not violate a maximum limit of VLANs on the physical port.

6. (Currently Amended) The method of claim 1 comprising the further step of storing the ~~valid-~~ validated configuration information at a network management system.
7. (Original) The method of claim 1 wherein the node is an Asynchronous Transfer Mode node.
8. (Original) The method of claim 1 wherein the bridged VLAN is in conformance with the 802.1q VLAN standard.
9. (Currently Amended) A system including at least one device capable of presenting graphical user interface (GUI) to an operator, the at least one device comprising a processor for providing configuration information for a bridged virtual local area network (VLAN) within a communication network, comprising:
 - a. instructions for presenting said graphical user interface (GUI) to the operator;
 - b. instructions for receiving an identification of a node and of a physical port through the GUI;
 - ~~e. instructions for receiving, when the VLAN is not an existing VLAN, a VLAN identifier (ID) from the operator through the GUI, and validating the requested VLAN ID with VLAN IDs in a list of VLAN configurations for VLANs which are configured on the node;~~
 - ~~[[d.]]c. instructions for receiving if the requested VLAN ID is valid, a validated VLAN configuration information from the operator through the GUI, wherein the VLAN configuration information comprises a requested VLAN identifier (ID) and at least one virtual port to be associated with a set of the VLAN; and~~

d. instructions for validating the VLAN configuration information;

e. instructions for generating locally a validated VLAN configuration according to the VLAN configuration information, wherein the validated VLAN configuration comprises a first set of at least one virtual port to be associated with the VLAN and a second set of zero or more virtual ports which cannot be assigned to the VLAN; and

[[e.]]f. instructions for transmitting the validated VLAN configuration to the node.

10.(Currently Amended) The system of claim 9 wherein the instructions for receiving ~~a validated VLAN configuration information~~ information comprise instructions for receiving, from the operator through the GUI, an identification of at least one virtual port currently belonging to a member set of the VLAN, said at least one virtual port being selected by the operator from a list of virtual ports currently in the member set.

11.(Currently Amended) The system of claim 9 wherein the instructions for receiving ~~a validated VLAN configuration information~~ information further comprise:

a. instructions for receiving, from the operator through the GUI, an identification of zero or more virtual ports currently belonging to a forbidden set of the VLAN; and

b. instructions for receiving, from the operator through the GUI, an identification of zero or more virtual ports currently belonging to an untagged set of the VLAN; and

wherein the instructions for validating the VLAN configuration information comprise:

- c. instructions for ensuring that the member set and the forbidden set have no virtual ports in common.

12. (Canceled)

13. (Currently Amended) The system of claim 9 ~~further comprising wherein the instructions for validating the VLAN configuration information comprise:~~

- a. instructions for determining from the existing configuration information[[on]] a number of VLANs currently configured on the physical port; and
- b. instructions for ensuring that configuration of [[fo]]the bridged VLAN on the physical port would not violate a maximum limit of VLANs on the physical port.

14. (Currently Amended) The system of claim 9 further comprising instructions for storing ~~valid~~ the validated configuration information at a network management system.

15. (Previously Presented) The system of claim 9 wherein the node is an Asynchronous Transfer Mode node.

16. (Previously Presented) The system of claim 9 wherein the bridged VLAN is in conformance with the 802.1q VLAN standard.

17. (Previously Presented) The method of claim 1 comprising the further steps of querying the node for the list of VLAN configurations which are currently configured on the node and storing the list.

18. (Previously Presented) The system of claim 9 further comprising instructions for querying the node for the list of VLAN configurations which are currently configured on the node and storing the list.
19. (New) The method of claim 1 wherein the step of validating the VLAN configuration information comprises, if the VLAN is a new VLAN, validating the requested VLAN ID by comparing the requested VLAN ID with VLAN IDs in a list of VLAN configurations for VLANs that are configured on the node.
20. (New) The system of claim 9 wherein the instructions for validating the VLAN configuration information further comprises instructions for, if the VLAN is a new VLAN, validating the requested VLAN ID by comparing the requested VLAN ID with VLAN IDs in a list of VLAN configurations for VLANs that are configured on the node.
21. (New) The method of claim 1 wherein the step of generating a validated VLAN configuration comprises the steps of:
- a. removing at least one port identified by the operator through the GUI from a list to which the at least one port currently belongs; and
 - b. adding the at least one port to a list identified by the operator through the GUI.
22. (New) The system of claim 9 wherein the instructions for generating a validated VLAN configuration comprise instructions for:
- a. removing at least one port identified by the operator through the GUI from a list to which the at least one port currently belongs; and

- b. adding the at least one port to a list identified by the operator through the GUI.
- 23.(New) The method of claim 1 wherein the first set is a member set of the VLAN and the second set is a forbidden set of the VLAN.
- 24.(New) The system of claim 9 wherein the first set is a member set of the VLAN and the second set is a forbidden set of the VLAN.